

**WASTEWATER TREATMENT
FY 2007
PROGRAM
GOALS AND OBJECTIVES**

**GOAL 1: MAINTAIN COMPLIANCE WITH NPDES PERMIT
REQUIREMENTS.**

- Objective 1: Meet the NPDES ammonia limit during all months. FY 2007.
- Objective 2: Meet effluent summer limits for all NPDES parameters. FY 2007.
- Objective 3: Improve laboratory data management availability for operations personnel to make process control decisions. FY 2007.
- Objective 4: Review draft NPDES permit upon receipt and respond quickly with any compliance concerns. FY 2007.
- Objective 5: Amend sampling, analysis, and operations if necessary to achieve compliance with new NPDES permit limits. FY 2007.

**GOAL 2: MEET CONSENT ORDER AND OPERATION AND MAINTENANCE
PLAN SCHEDULED TARGETS**

- Objective 1: Minimize the potential of plant and pump station overflows and bypasses through the creation and implementation of a formal wet weather operational plan. FY 2007.
- Objective 2: Prepare and begin implementation of the capital improvements plan and schedule based upon regulator-approved reports and evaluations submitted in 2006. FY 2007.
- Objective 3: Expand operational SCADA system with logical information for supervision and operations personnel monitoring and control. FY 2007.
- Objective 4: Conduct a re-evaluation of the short-term WWTP operational bottlenecks and solutions and implement a reprioritized response. FY 2007.
- Objective 5: Re-evaluate the vulnerability assessment of key processes. FY 2007.
- Objective 6: Re-evaluate the spare parts inventory based upon above operational assessments and implement the response. FY 2007.

GOAL 3: **INCREASE ENFORCEMENT OF INDUSTRIAL PRETREATMENT PROGRAM**

- Objective 1: Increase sampling of all industries by City personnel and industrial self-monitoring through permit requirements and scheduling following non-compliance events. FY 2007.
- Objective 2: Maintain less than 15% of industries in unaddressed significant non-compliance quarterly. FY 2007.
- Objective 3: Remove the City of Reading from EPA Quarterly Non-Compliance Report. FY 2007.
- Objective 4: Increase the use of consent orders and agreements with industries in accordance with the EPA-approved enforcement response plan. FY 2007.
- Objective 5: Use both custom spreadsheets and commercial pretreatment software for compliance and milestone tracking for all permitted industrial users. FY 2007.
- Objective 6: Respond to US EPA comments and requests during the headworks evaluation review as well as Council adoption and municipal approval. FY 2006.
- Objective 7: Provide all laboratory staff with education regarding industrial pretreatment program. FY 2007.

GOAL 4: **ISSUE AND COLLECT ALL INDUSTRIAL FINES, FEES, AND SURCHARGES**

- Objective 1: Improve tracking and accuracy of reports detailing delinquent collections from industries. FY 2007.
- Objective 2: Sample all surchargeable industries on at least a quarterly basis. FY 2007.
- Objective 3: Re-evaluate and implement industrial surcharge charges and permit application, sampling, and inspection fees. FY 2007.

GOAL 5: **IMPROVE OPERATIONS AND MAINTENANCE EFFICIENCY, EFFECTIVENESS, AND PRIORITIZATION**

- Objective 1: Implement recurring work orders covering operations and operational maintenance. FY 2007.
- Objective 2: Create and implement a work order prioritization system using the ranking index for maintenance expenditures. FY 2007.

Objective 3: Track and review useful performance measures for operational, maintenance, and laboratory personnel. FY 2007.

GOAL 6: **MINIMIZE FINANCIAL IMPACTS OF ROUTINE AND MANDATED REQUIREMENTS**

Objective 1: Reduce utility costs at the North Reading pump station and monitor utility costs at all locations to confirm anticipated cost reductions in conjunction with UtiliTech's recommendations. FY 2007.

Objective 2: Explore grants available through local, state, and federal levels. FY 2007.

Objective 3: Evaluate and implement cost-saving employee suggestions. FY 2007.

Objective 4: Evaluate costs and fees to confirm applicable costs are defrayed by revenue received. FY 2007.

GOAL 7: **CONTINUE TO STANDARDIZE PROCEDURES AND IMPROVE STANDARDS.**

Objective 1: Formalize the list and prioritize a schedule for the updating, development, and implementation of standard operating procedures by area – operations, operational maintenance, mechanical/electrical maintenance, and laboratory. FY 2007.

Objective 2: Review, update, and implement the Risk Management Plan in compliance with regulations. FY 2007.

GOAL 8: **OBTAIN PA DEP LABORATORY ACCREDITATION**

Objective 1: Successfully respond to initial on-site audit. FY 2007.

Objective 2: Reduce corrective actions following quality control excursions. FY 2007

GOAL 9: **MINIMIZE ODOR GENERATION AT THE PLANT.**

Objective 1: Optimize solids handling operations preconditioning chemicals to minimize scrubber inlet concentrations. FY 2007.

Objective 2: Operate and optimize air scrubbers' operations within PA DEP regulations. FY 2007.

Objective 3: Perform operational maintenance to optimize treatment process and reduce odor generation through trickling filter flooding and flushing on a scheduled basis within the formal work order system. FY 2007.

Objective 4: Research and implement improvements to the liquid oxygen systems or replace them with chemical addition based upon overall effectiveness, efficiency, and capital and operational costs. FY 2007.

GOAL 10: **CONTINUE EMPLOYEE DEVELOPMENT**

Objective 1: Schedule safety training for employees utilizing videos and/or vendor training for both new employee orientation and all employees through a cooperative effort with the Risk and Safety Coordinator. FY 2007.

Objective 2: Encourage cross training of Shift Supervisors to obtain CDLs as required and be able to operate the combination flusher and vacuum trucks. FY 2007.

Objective 3: Provide training opportunities through seminars and videos to achieve 100% of Shift Supervisors passing the appropriate PA DEP certification examination. FY 2007.

Objective 4: Provide correspondence training opportunities and select seminars to provide pre-certification training for all AFSCME 2763 personnel required to obtain the appropriate PA DEP certification per the contract. FY 2007.

Objective 5: Arrange vendor training and select seminars to provide maintenance personnel to keep skills current with equipment and technology. FY 2007.

Objective 6: Provide continuing education and cross-training for laboratory personnel and provide exposure to other wet chemistry laboratories and methods. FY 2007.

GOAL 11: **CONTINUE IMPROVED COMMUNICATION AMONG PUBLIC WORKS STAFF FOR MATTERS IMPACTING WASTEWATER QUANTITY OR QUALITY**

Objective 1: Discuss with sanitary sewers any unusual situations they observe in the collection system and investigate immediately. FY 2007.

Objective 2: Continue to share equipment where possible with other crews to reduce capital duplication. FY 2007.

GOAL 12: **ADD SOMETHING FOR NEW LAB/ADMINISTRATION BUILDING**

Expenditures	2005 Actual	2006 Budget	2007 Budget
Personnel	2,661,134	3,318,973	3,256,619
Operating	4,657,992	5,669,745	6,634,965

**SANITARY & STORM SEWERS
FY 2007
PROGRAM
GOALS AND OBJECTIVES**

GOAL 1: CLEAN AND INSPECT SANITARY SEWER MAINS AND APPURTENANCES TO IDENTIFY NECESSARY REPAIRS

- Objective 1: Develop and initiate systematic city wide cleaning of sanitary sewer mains in conjunction with developing an ongoing inflow and infiltration reduction program. FY 2007.
- Objective 2: Select and adopt standards to inspect and evaluate the condition of sanitary sewer manholes as past of the requisite sanitary sewer system evaluation survey. FY 2007.
- Objective 3: Document and prioritize required sanitary sewer repairs. FY 2007.
- Objective 4: Schedule line cleaning in known problem areas and low flow areas using recurring work orders to reduce sewer complaints and odors. FY 2007.

GOAL 2: DEVELOP AND INITIATE CITY-WIDE PROACTIVE CLEANING AND INSPECTION OF STORM SEWER MAINS AND CATCH BASINS

- Objective 1: Inspect all storm sewer catch basins on at least a biennial basis. FY 2007.
- Objective 2 Document and prioritize cleaning of storm sewer inlets to reduce flooding, odors, and resident complaints while protecting storm sewer water quality being discharged. FY 2007.
- Objective 3: Research alternatives for best management practices and debris removal within the storm water system. FY 2007.
- Objective 4: Document and prioritize necessary repairs to basins and inlets. FY 2007.

GOAL 3: INSPECT CITY-WIDE STORM SEWERS

- Objective 1: Inspect and document findings for all storm sewer outfalls on an annual basis by engineering personnel. FY 2007.
- Objective 2: Inspect storm sewer mains to prioritize necessary repairs. FY 2007.
- Objective 3: Develop and initiate systematic inspection of storm sewers, swales, and structures to comply with MS4 program requirements and to minimize flooding and associated damage. FY 2007.

GOAL 4: **IMPROVE ASSET MANAGEMENT USING GIS AND COMPUTER TECHNOLOGY TO MEET CONSENT DECREE REQUIREMENTS**

- Objective 1: Work with other City departments and contractors to develop a GIS system to be used for sanitary and storm sewer mapping. FY 2007.
- Objective 2: Continue work to develop systematic field verified sanitary sewer mapping to a functional level. 11/ 2007.
- Objective 3: Work with City GIS, contractors, and engineers to develop flow modeling for larger diameter sanitary sewer interceptors 11/2007.
- Objective 4: Continue work to develop systematic field-verified storm sewer mapping as needed for the Phase II municipal separate storm sewer system regulations and the Consent Decree. FY 2007.
- Objective 5: Begin software implementation for GIS and associated asset management software for planning and tracking repairs and maintenance. FY 2007.
- Objective 6: Evaluate and prepare to upgrade televisual technologies to improve data management and accessibility through GIS compatible software. FY 2007.

GOAL 5: **CONTINUE FLOW METERING AND REHABILITATION PRIORITIZATION FOR SANITARY SEWER SYSTEM EVALUATION SURVEY**

- Objective 1: Analyze flows by sub-basins from metering data to prioritize and areas to direct attention and effort. FY 2007.
- Objective 2: Continue inspection and prioritization within sub-areas by additional flow monitoring and physical inspection and evaluation of lines and structures. FY 2007

GOAL 6: **MINIMIZE FINANCIAL IMPACTS OF ROUTINE AND MANDATED REQUIREMENTS**

- Objective 1: Evaluate and implement procedures to minimize overtime for routine procedures. FY 2007.
- Objective 2: Emphasize proactive planned maintenance to reduce emergency situations. FY 2007.
- Objective 3: Explore grants available and partnering opportunities. FY 2007.
- Objective 4: Evaluate and implement cost-saving employee suggestions. FY 2007.

Objective 5: Work with contributing municipalities to verify accuracy of flows being reported and paid for transmission and treatment. FY 2007.

GOAL 7: STANDARDIZE PROCEDURES FOR CONSISTENCY WITHIN TEAM

Objective 1: Begin determining routine tasks for the development, documentation, and implementation of standard operating procedures. FY 2007.

Objective 2: Improve documentation of existing procedures for non-routine tasks. FY 2007.

Objective 3: Develop procedures for evaluation of the effectiveness and efficiency of methods and equipment to select same for standardized use. FY 2007.

GOAL 8: CONTINUE EMPLOYEE DEVELOPMENT

Objective 1: Provide training opportunities through seminars, classes, and videos to enable employees to improve knowledge, performance, safety, and efficiency of tasks. FY 2007.

Objective 2: Provide opportunities for correspondence courses and select seminars to encourage employees to seek Pa DEP certification under new collection system certification. FY 2007.

Objective 3: Provide two hours training to all Public Works personnel whose job tasks may impact storm water quantity and quality. FY 2007.

GOAL 9: CONTINUE IMPROVED COMMUNICATION AMONG CITY STAFF THAT IMPACT THE QUANTITY OR QUALITY OF WASTEWATER OR STORM WATER

Objective 1: Develop and provide education to health inspectors regarding the importance of grease trap maintenance for the overall condition and maintenance of the sanitary sewer collection system. FY 2007.

Objective 2: Discuss with plant personnel any unusual situations discovered in the system that may impact plant operations or industrial pretreatment. FY 2007.

Objective 3: Continue to share equipment where possible with other crews to reduce capital duplication. FY 2007.

Objective 4: Coordinate with wastewater laboratory to sample any sanitary sewer overflows or suspected storm water contamination. FY 2007.

Expenditures	2005 Actual	2006 Budget	2007 Budget
Personnel	739,987	1,139,544	1,130,103
Operating	818,240	1,760,379	2,073,250